RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/049.358A
Source:	1FW/b
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RAW SEQUENCE LISTING DATE: 10/16/2006
PATENT APPLICATION: US/10/049,358A TIME: 11:01:14

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Output Set: N:\CRF4\10162006\J049358A.raw

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3 <110> APPLICANT: DAVIS, Maria
            NELSON, John
      5
              KUMAR, Shiv
      6
             FINN, Patrick
             NAMPALLI, Satyam
             FLICK, Parke
     10 <120> TITLE OF INVENTION: TAQ DNA POLYMERASES HAVING AN AMINO ACID SUBSTITUTION AT
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              HOMOLOGS THEREOF EXHIBITING IMPROVED SALT TOLERANCE
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     13 <130> FILE REFERENCE: PB9944
     15 <140> CURRENT APPLICATION NUMBER: US 10/049,358A
     16 <141> CURRENT FILING DATE: 2002-05-17
     18 <150> PRIOR APPLICATION NUMBER: PCT/US00/22150
     19 <151> PRIOR FILING DATE: 2000-08-10
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     22 <151> PRIOR FILING DATE: 1999-09-17
     24 <150> PRIOR APPLICATION NUMBER: US 60/150,167
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     27 <160> NUMBER OF SEQ ID NOS: 5
     29 <170> SOFTWARE: PatentIn version 3.3
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99			_	_	245		_		_	250	_				255	
102	Asp	Phe	e Ala	a Lys	Arg	Arg	g Gli	ı Pro	o Ası	o Arg	g Glı	ı Arg	J Lei	ı Arg	, Ala	l Phe
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107			27					28					285			
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114	Ala	Phe	e Val	LGly	/ Phe	val	. Leı	ı Se	r Arg	J Ly	s Glı	ı Pro	Met	Trp	Ala	Asp
115	305	5		_		310)			_	31!	5 .				320
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119					325					330					335	
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123			_	340)				345	5				350)	
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127	•		355	5				360	0				365	5		
130	Pro	Gly	/ Asp	Asp	Pro	Met	: Lei	ı Leı	ı Ala	а Ту	r Lei	ı Leı	ı Ası	Pro	Ser	Asn
131		370)				375	5				380)			
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135	385	;				390)				39!	5				400
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		Thi	Sei	c Ala	a Ala	val	Leu			a Lei	ı Ar	g Glı			Pro	Ile
167			519					520					525			
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171		530)				535	5				540)		•	

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183	_		_	580		51	-1.		585	~ 1	~ 1		.	590	** - 7	
	.Arg	TTE	_	Arg	Ата	Pne	ше		GIU	GIU	GIY	Trp		ьeu	vaı	Ala
187	_		595	.	a1 .	-1.	~ 1	600	3	**- 3	7	3 -	605	7	0	~ 1
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191	_	610	_	_		_	615	5 1	~1	~1	~ 1	620		-1.	**!	ml
	Asp	GIU	Asn	ьeu	тте	_	vai	Pne	GIn	GIU	_	Arg	Asp	11e	HIS	
	625	1				630	5 1	~1	** - 1	D	635	~ 1	a 7	**- 7	3	640
	Glu	Thr	Ата	ser	_	мет	Pne	GIY	vai		Arg	GIU	Ата	vaı		Pro
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	Leu	Met	Arg		Ата	Ата	ьys	Thr		Asn	Pne	GIY	vai		Tyr	GIY
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	Met	ser		His	Arg	Leu	ser		GIU	ьeu	Ата	TTE		Tyr	GIU	GIU
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	Ala		Ala	Pne	TTE	GIU	_	Tyr	Pne	GIN	ser		Pro	гаг	vai	Arg
211		690	-1-	~1	.	m1	695	~ 1	a 1	a 1	3	700	3	01		*** 7
	Ala	Trp	шe	Glu	гàг		ьeu	GIU	GIU	GIY	-	Arg	Arg	GIA	Tyr	
	705	(T)	÷	Dl	a 1	710	3	7	т	*** 7	715	7	T	α1	71.	720
	Glu	Thr	ьeu	Pne	_	Arg	Arg	Arg	Tyr		Pro	Asp	Leu	GIU		Arg
219	*** 1	T	a	77- 7	725	~1	77-	77-	~1	730	16- L	n 1 ≟	nh -	7	735	Desc
	Val	гаг	ser		Arg	GIU	Ala	Ala		Arg	мес	Ата	Pne		Mec	PIO
223	**- 7	~1	a1	740	7 T _	77.	7	7	745 Mat	T	T 011	71.	Mot	750	T	T 011
	Val	GIII	_	THE	Ата	Ala	Asp		Met	гуѕ	ьeu	Ala		vaı	цуы	теп
227	Dha	Dwa	755	T 011	C1	C1	Mot	760	ח ד ת	7/~~	Mot	T 011	765	C15	17-1	uic
	Phe	770	Arg	ьеи	GIU	GIU	775	GIY	AIA	Arg	Met	780	ьeu	GIII	vai	птъ
231	Asp		T 011	7727	T 011	~1		Dwo	Tara	C1	7 ~~		C1,,	ח ד ת	17-1	ת א
	785	GIU	пеп	vai	пеп	790	AIA	PIO	цуъ	GIU	795	AIA	GIU	AIA	vai	800
	Arg	T 011	71-	Tura	C1.,		Mot	C1.,	C1.,	17n]		Dro	T 011	פות	17a l	
239	Arg	ьеи	нια	цуѕ	805	val	Mec	GIU	GIY	810	TAT	PIO	Бец	AIG	815	FIO
	Leu	Clu.	17a 1	Gl ₁₁		C111	Tla	Clv	Glu		Trn	T.011	Sor	בות		Glu
243	пеп	GIU	vai	820	vai	Gry	116	Gry	825	иор	пр	шси	DCI	830	цуз	Olu
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	Leu	Glu	Ser	Pro	-	Δla	T.e11	Glu	Glu		Pro	Trn	Pro	Pro		Glu
258	⊥ ∈u	o ₁ u	JULI	20	Ly S	лта	Leu	914	25	mu	110	P	110	30	110	J_4
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262	O L y	111U	35	VUI	O ₁ y	1110	VUL	40	JUL	9	-15	-1u	45		1	
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266	Top	50	⊒G U	TIG	Leu	лта	55	TTC	y	O _T y	O T Y	60	· uı	****	9	
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Input Set : A:\PB9944.ST25.txt

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378				500					505					510		
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382			515					520					525			
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	Glu															
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		Arg	GIY	мет	Leu	Pro	ьeu	Pne	GIU		ьys	GIY	Arg	vaı		Leu
405		77.	C1	1114 ~	5 11: 0	T 011	ח ד ת	П	71 20 00	10	Dho	uia	71-	T 011	15	C111
409	Vai	Ala	Gry	20	His	пеа	AIA	ıyı	25	1111	Pile	птъ	на	30	пуъ	GIY
	T.Ou	Thr	Thr		Arg	Gl v	Glu	Dro		Gln	Δla	Val	Тиг		Dhe	ΔΊα
413	Бец	1111	35	SET	Arg	GLY	Giu	40	vai	GIII	AIG	vai	45	OLY	THE	AIG
	Lvc	Ser		Leu	Lys	Δla	T.e.ii		Glu	Asn	Glv	Asp		Val	Tle	Val
417	_,,	50			_,,		55	_, 5	014		U -1	60				
	Val		Asp	Ala	Lys	Ala		Ser	Phe	Ara	His		Ala	Tvr	Glv	Glv
421			- L		2	70	,			3	75			-1-	1	80
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428	Ala	Leu	Ile	Lys	Glu	Leu	Val	Asp	Leu	Leu	Gly	Leu	Ala	Arg	Leu	Glu
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453	01	01	195	~ 2 = :	0	T	a 1	200	T	T	T	7	205	7	7	T a
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VERIFICATION SUMMARY

DATE: 10/16/2006 PATENT APPLICATION: US/10/049,358A TIME: 11:01:15

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